

I. Status of the Application

Claims 8-17 and 19-27 are pending in this application. In the January 5, 2009 office action, the Examiner:

A. Rejected claims 8-17 and 19-27 under 35 U.S.C. §112, second paragraph as allegedly being indefinite;

B. Rejected claims 8-11, 16-17, 19 and 24-27 under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent Publication No. 2003/0212815 to Tzeng (hereinafter “Tzeng”) in view of U.S. Patent Publication No. 2002/0071398 to Moran et al. (hereinafter “Moran”) further in view of U.S. Patent No. 7,145,866 to Ting et al. (hereinafter “Ting”);

C. Rejected claims 12 and 20 under 35 U.S.C. §103(a) as allegedly being unpatentable over Tzeng in view of Moran and Ting, and further in view of U.S. Patent No. 6,356,951 to Gentry (hereinafter “Gentry”);

D. Rejected claims 13-15 and 21-23 under 35 U.S.C. §103(a) as allegedly being unpatentable over Tzeng in view of Moran, Ting and Gentry, and further in view of U.S. Patent No. 6,226,292 to Di Placido (hereinafter “Di Placido”);

In this response, applicants respectfully traverse the indefiniteness and obviousness rejections of the claims and request favorable reconsideration of the application in light of the following remarks.

II. Rejection of Claims 8-17 and 19-27 Under 35 U.S.C. § 112

In the January 5, 2009 Office Action (hereinafter “Office Action”), the examiner rejected claims 8-17 and 19-27 under 35 U.S.C. § 112, second paragraph as allegedly being

indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner specifically stated that it is “not clear what is meant by FE and GE ports because the specification refers to the claimed FE and GE ports as interfaces [page 3 lines 15-20].” (Office action at p.2). Applicants respectfully traverse.

In particular, Applicants respectfully submit that one of ordinary skill in the art could readily determine the metes and bounds of the claims incorporating the phrases “FE ports” and “GE ports”. Those terms are known in the art, particularly in light of their use in the specification and claims. To this end, the specification references the claimed phrases “FE ports” and “GE ports” at p.2, lines 10-11 and lines 22-23, at p.5, lines 1-2, and at p.6, lines 17-18. In addition, the Abstract further recites such “FE ports” and “GE ports”. In view of these recitations in the specification, it is respectfully submitted that the meaning of these terms is not indefinite or unclear. For at least this reason, it is respectfully submitted that the indefiniteness rejection of claims 9-17 and 19-27 are in error and should be withdrawn.

### III. The Obviousness Rejection of Claim 8 Should be Withdrawn

In the Office Action, the Examiner rejected independent claim 8 as allegedly being unpatentable over Tzeng, Moran and Ting. As will be discussed below in detail, the proposed combination does not arrive at the claimed invention. In particular, none of Tzeng, Moran or Ting, either alone or in combination, teach or suggest an “ingress/egress port [that] is switchable between a first mode and a second mode, in which the ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode”, as claimed in claim 8. As a consequence, it is respectfully submitted that the obviousness

rejection of claim 8 should be withdrawn.

A. Claim 8

Claim 8 is directed to an ingress/egress port for an Ethernet switch, the ingress/egress port comprising a plurality of Media Access Control (MAC) interfaces, and receive and transmit modules. Each MAC interface is capable of receiving/transmitting Fast Ethernet (FE) packets, and at least one of the MAC interfaces further being configurable to receive/transmit Gigabit Ethernet (GE) packets. The receive and transmit modules are configurable respectively to receive both GE and FE packets from, and transmit both GE and FE packets to, all the MAC interfaces. The ingress/egress port is switchable between a first mode and a second mode, in which the ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode.

Accordingly, the ingress/egress port has (at least) two modes of operation – a single GE-port mode and a multiple-FE-port mode.

B. Tzeng, Moran Do Not Teach Multi-Mode Ports

Tzeng discloses a method for communicating data between network devices. Fig. 1 of Tzeng shows MAC devices coupled to ingress/egress ports. (See office action at p.3). Moran teaches a selectable bandwidth facility for a network port. The Examiner has admitted that Tzeng fails to disclose transmit and receive modules. (*Id.*) To cure this deficiency, the Examiner cites the teachings of Moran. (*Id.*).

The Examiner has further admitted that the combination of Tzeng and Moran fails to

include an “ingress/egress port [that] is switchable between a first mode and a second mode, in which the ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode”. (Office action at p.4). To address the admitted deficiency of Tzeng and Moran, the Examiner cited Ting.

C. Ting Does Not Teach Multi-Mode Ports

Contrary to the Examiner’s assertion, Ting does not teach or suggest an “ingress/egress port [that] is switchable between a first mode and a second mode, in which the ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode”. It is respectfully submitted that the Examiner has misinterpreted the teachings of Ting.

In particular, the Examiner has alleged that Ting teaches “a Network Interface Card (NIC) (ingress/egress port) that includes more or less network device ports (switchable).” (Office action at p.4). In support, the Examiner has alleged that Ting teaches that “a NIC can have either eight FE device ports (second mode) or one GE device port (first mode) [**col. 4 lines 13-16**].” (*Id.*) Thus, the Examiner appears to allege that column 4, lines 13-16 of Ting teach a NIC card that is switchable between an eight-FE-port mode and a GE-port mode. Applicants respectfully disagree.

As will be discussed below, the cited portions of the Ting merely teach that a NIC card may be *constructed* to have a GE port (i.e. a full-time GE port), *or* may otherwise be *constructed* to have more than one FE port (i.e. a full-time FE ports). Thus, a NIC card can have either construction, but not a switchable mode construction. Nothing in Ting teaches that a NIC card can *switch* between a GE-port mode and a multiple-FE-port mode.

To this end, the cited portion of Ting is set forth below:

Each NIC 134-0, ..., 134-4 is shown with two network device ports 136-0, ..., 136-9. However, any of the NICs 134-0, ..., 134-4 can include more or less network device ports. For example, a NIC can include eight Fast Ethernet (FE) device ports or one Gigabit Ethernet (GE) device port.

(Ting at col. 4, lines 12-16). Nothing in the above-quoted paragraph indicates that a NIC can have two modes. In other words the above-quoted passages does not teach or imply that a NIC is *switchable* between eight FE port and one GE port operation. The above-quoted paragraph merely states that the NIC may be constructed to be one way or the other. More specifically, the paragraph taken as a whole states that while the exemplary NICs shown in the drawing have two ports, those NICs may be substituted with *other* NICs that have other quantities of ports. Such a substitute NIC may have, for example, eight FE ports or one GE port.

Consider the same sentences, substituting in facts from an imaginary automotive example. *Each automobile is shown with four doors. However, any one of the automobiles can include more or less doors. For example, an automobile can include two doors or five doors.* Obviously, one would not assume that a particular automobile can be switched from a two door mode and a five door mode.

This example illustrates that the above-quoted passages of Ting do not suggest that the NIC is *switchable* between a GE-port mode and a multiple-FE-port mode. Instead, it means NICs may be used that have either a GE port construction or a multiple FE port construction.

Accordingly, it is respectfully submitted that Ting does *not* teach or suggest an “ingress/egress port [that] is switchable between a first mode and a second mode, in which the ingress/egress port operates as a single GE port in the first mode and as more than one FE port

in the second mode”, as claimed in claim 8. As discussed above, the Examiner has admitted that Tzeng and Moran also fail to teach such first and second modes of port operation. Accordingly, the proposed combination of Tzeng, Moran and Ting does not arrive at the invention of claim 8. For at least this reason, it is respectfully submitted that the rejection of claim 8 is in error and should be withdrawn.

### III. The Rejection of Dependent Claims 9-16

In the Office Action, the Examiner rejected dependent claims 9-16 as allegedly being obvious over Tzeng, Moran and Ting, and in some cases, in view of additional prior art. Dependent claims 9-16 all depend from and incorporate all the limitations of independent claim 8. None of the modifications proposed by the Examiner in connection with the rejection of claims 9-16 cure the deficiencies of Tzeng, Moran and Ting with respect to claim 8. Accordingly, it is respectfully submitted that dependent claims 9-16 are also allowable for at least the same reasons as those for which claim 8 is allowable. Therefore, the Examiner’s rejections of claims 9-16 should be withdrawn.

### IV. The Rejection of Claim 17 is in Error

Claim 17 also stands rejected as allegedly being anticipated by Tzeng, Moran, and Ting. Claim 17 is directed to an Ethernet switch that includes the following limitation:

wherein each ingress/egress port is switchable between a first mode and a second mode, in which each ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode.

As discussed above, the proposed combination of Tzeng, Moran and Ting does not arrive and any “ingress/egress port [that] is switchable between a first mode and a second mode, in which

the ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode”. Accordingly, for reasons substantially similar to those discussed above in connection with claim 8, it is respectfully submitted that the rejection of claim 17 over Tzeng, Moran and Ting is in error and should be withdrawn.

V. The Rejection of Dependent Claims 19-23

In the Office Action, the Examiner rejected dependent claims 19-23 as allegedly being obvious over Tzeng, Moran and Ting, and in most cases, in view of additional prior art. Dependent claims 19-23 all depend from and incorporate all the limitations of independent claim 17. None of the modifications proposed by the Examiner in connection with the rejection of claims 19-23 cure the deficiencies of Tzeng, Moran and Ting with respect to claim 17. Accordingly, it is respectfully submitted that dependent claims 19-23 are also allowable for at least the same reasons as those for which claim 17 is allowable. Therefore, the Examiner’s rejections of claims 19-23 should be withdrawn.

VI. The Rejection of Claim 24 is in Error

Claim 24 also stands rejected as allegedly being anticipated by Tzeng, Moran, and Ting. Claim 24 is directed to a method that includes a step of:

Switching the ingress/egress port between a first mode and a second mode, in which each ingress/egress port operates as a single GE port in the first mode and as more than one FE port in the second mode.

As discussed above, the proposed combination of Tzeng, Moran and Ting does not arrive and any ingress/egress port (or any other device) that “is switchable between a first mode and a second mode, in which the ingress/egress port operates as a single GE port in the first mode

and as more than one FE port in the second mode”. Accordingly, for reasons substantially similar to those discussed above in connection with claim 8, it is respectfully submitted that the rejection of claim 24 over Tzeng, Moran and Ting is in error and should be withdrawn.

VII. The Rejection of Dependent Claims 25-27

In the Office Action, the Examiner rejected dependent claims 25-27 as allegedly being obvious over Tzeng, Moran and Ting. Dependent claims 25-27 all depend from and incorporate all the limitations of independent claim 24. As discussed above, the proposed combination of Tzeng, Moran and Ting does not arrive at the invention of claim 24. Accordingly, it is respectfully submitted that dependent claims 25-27 are also allowable for at least the same reasons as those for which claim 17 is allowable. Therefore, the Examiner’s rejections of claims 25-27 should be withdrawn.



VI. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicant has made a patentable contribution to the art. Favorable reconsideration and allowance of this application is therefore respectfully requested.

In the event applicant has inadvertently overlooked the need for an extension of time or payment of an additional fee, the applicant conditionally petitions therefore, and authorizes any fee deficiency to be charged to deposit account 13-0014.

Respectfully submitted,

/Harold C. Moore/

Harold C. Moore  
Attorney for Applicants  
Attorney Registration No. 37,892  
Maginot Moore & Beck  
Chase Tower  
111 Monument Circle, Suite 3250  
Indianapolis, Indiana 46204-5109  
Telephone: (317) 638-2922